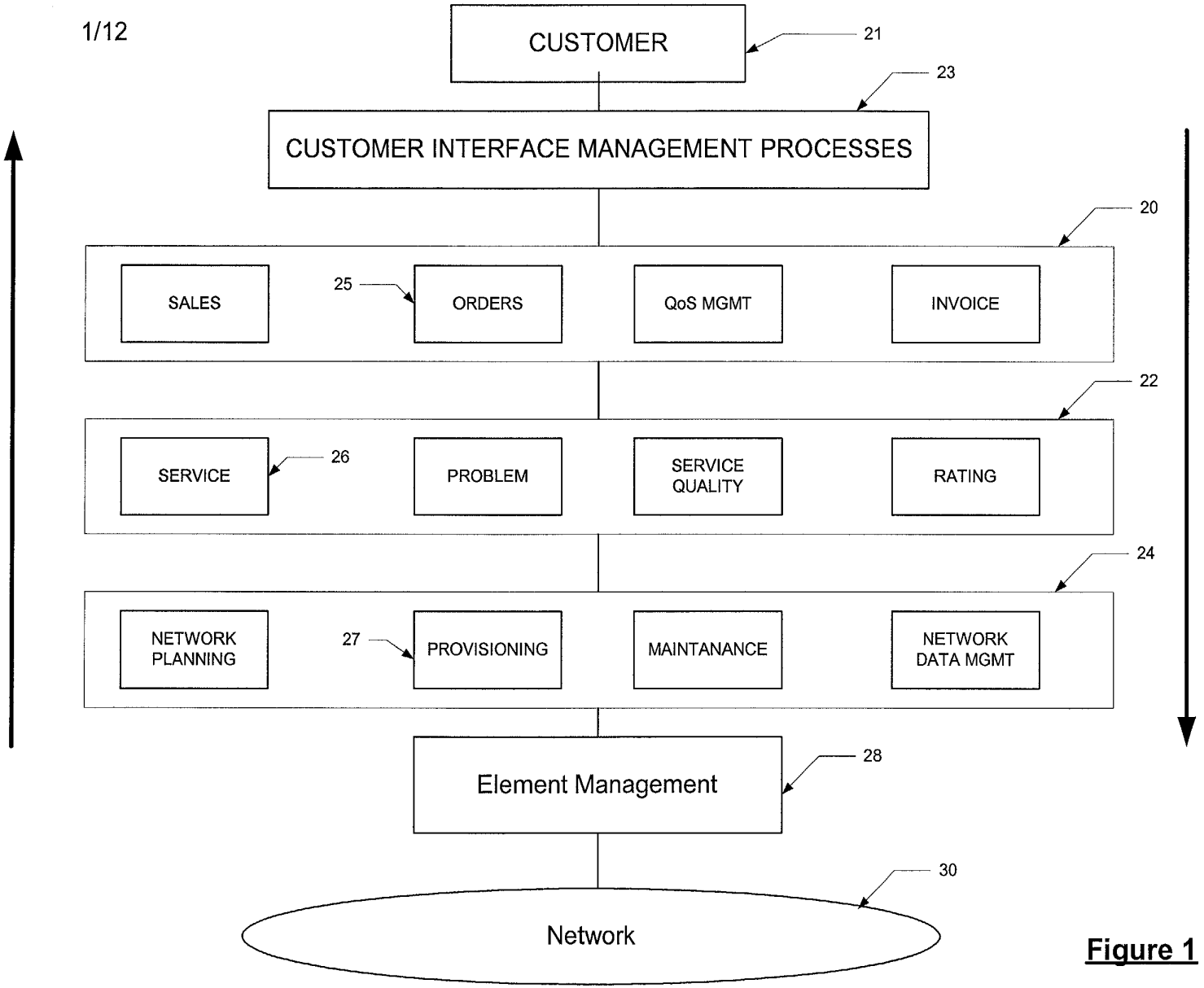

CUSTOMER
21
23
CUSTOMER INTERFACE MANAGEMENT PROCESSES
20
SALES
25
ORDERS
QoS MGMT
INVOICE
22
SERVICE
26
PROBLEM
SERVICE QUALITY
RATING
24
NETWORK PLANNING
27
PROVISIONING
MAINTANANCE
NETWORK DATA MGMT
Element Management
28
30
Network

Figure 1

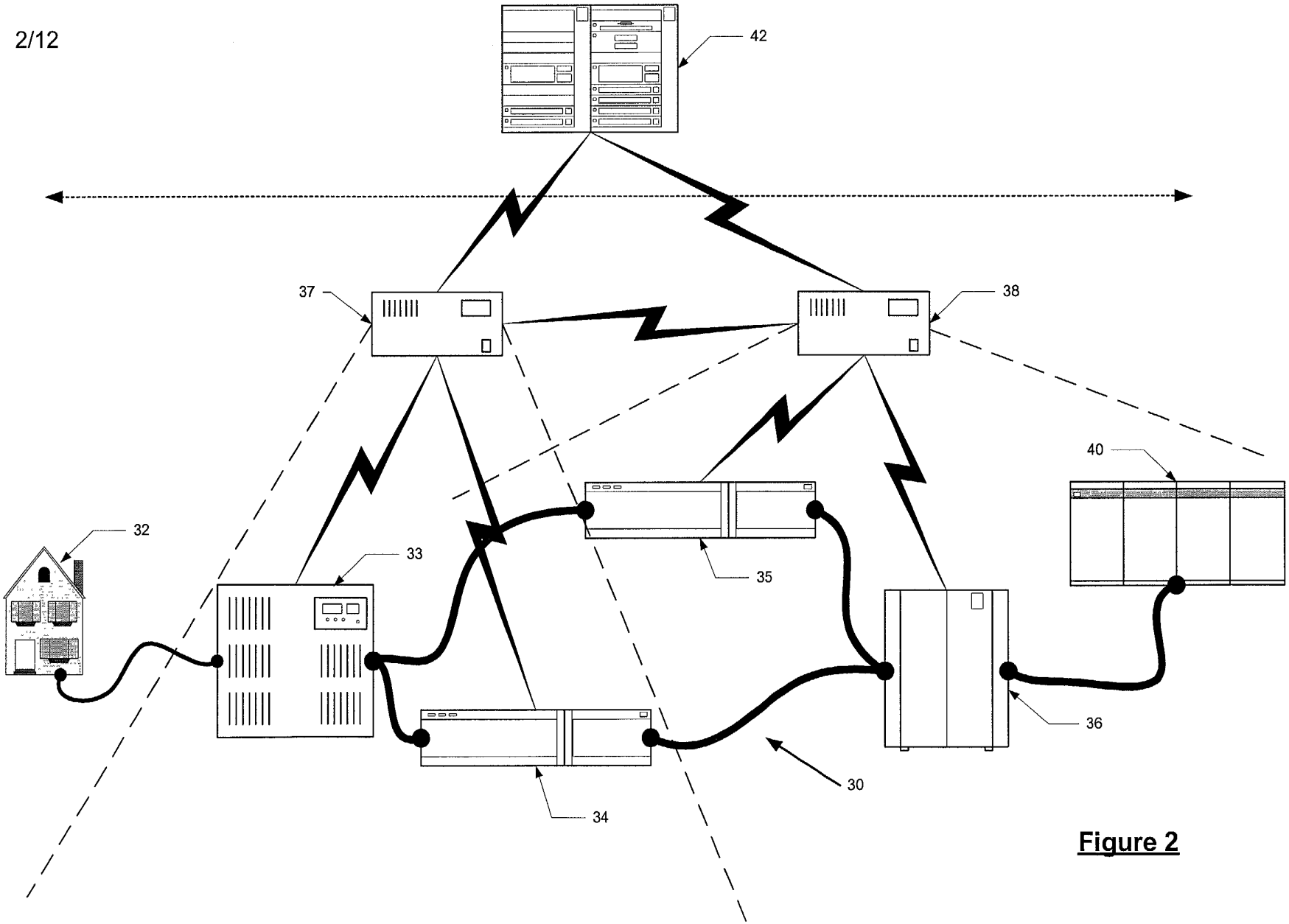


Figure 2

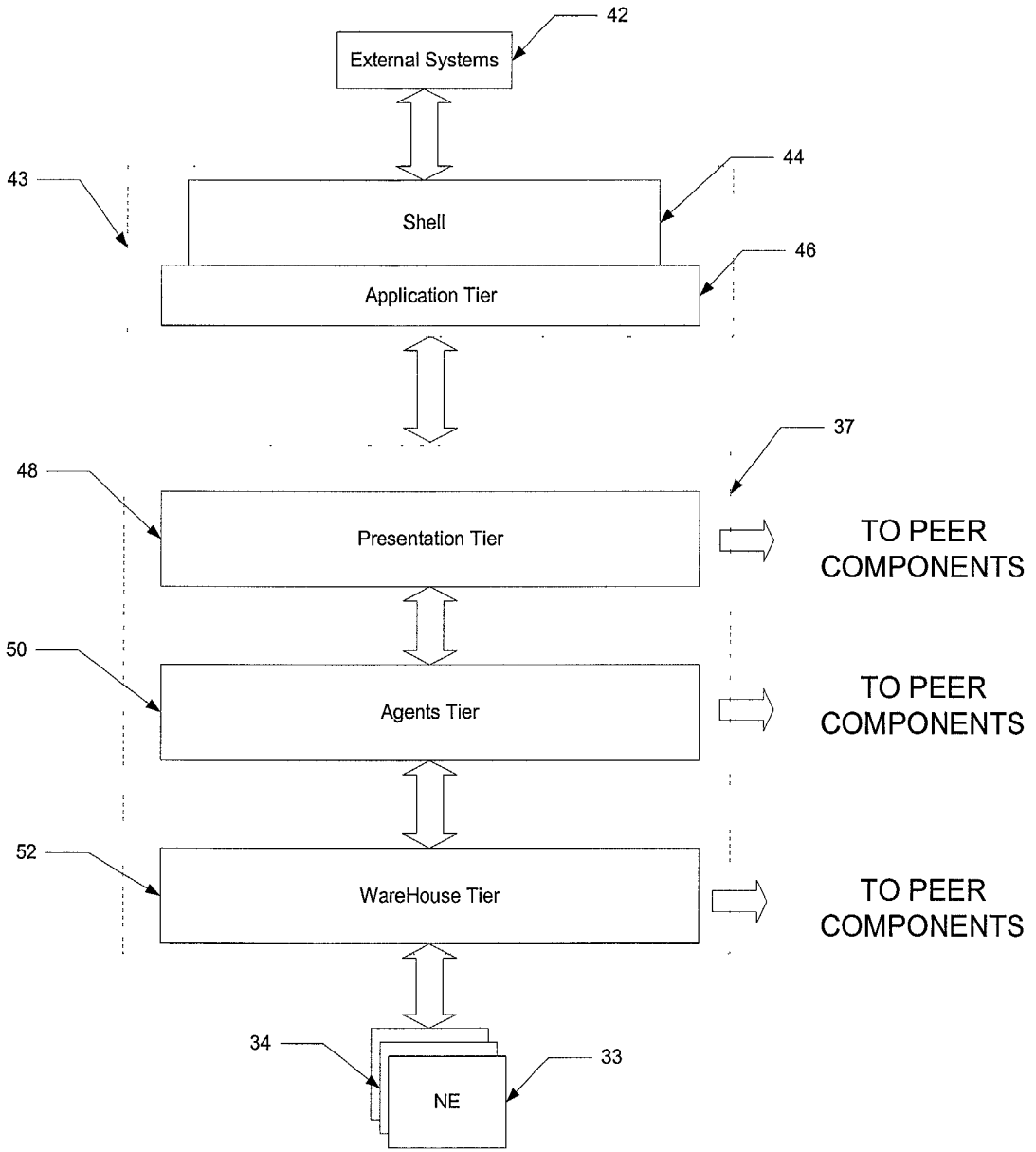

42
External Systems
43
44
Shell
46
Application Tier
37
48
Presentation Tier
TO PEER COMPONENTS
50
Agents Tier
TO PEER COMPONENTS
52
WareHouse Tier
TO PEER COMPONENTS
34
33
NE

Figure 3

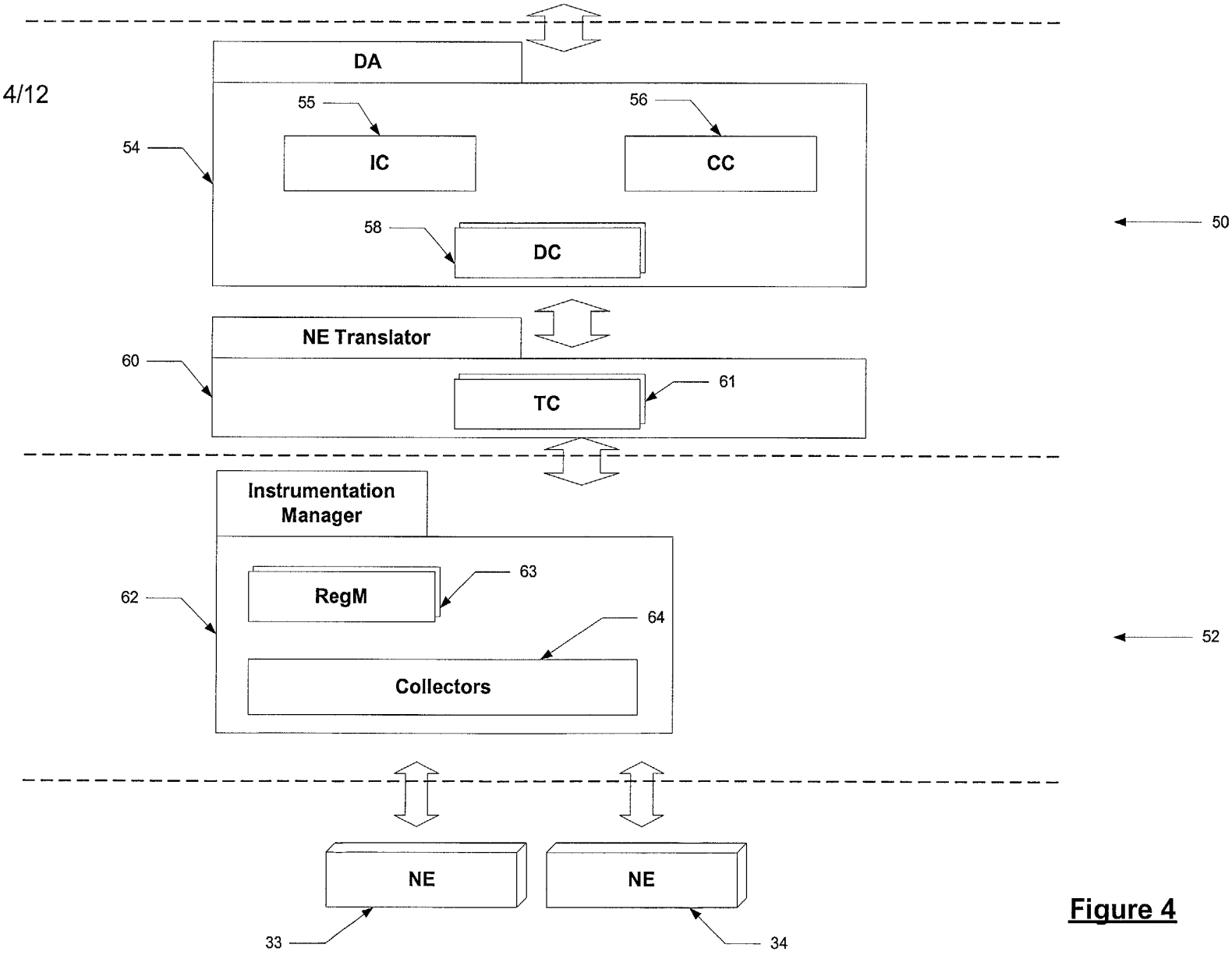

DA
55
56
54
IC
CC
58
DC
50
NE Translator
60
61
TC
Instrumentation Manager
63
62
RegM
64
52
Collectors
NE
NE
33
34

Figure 4

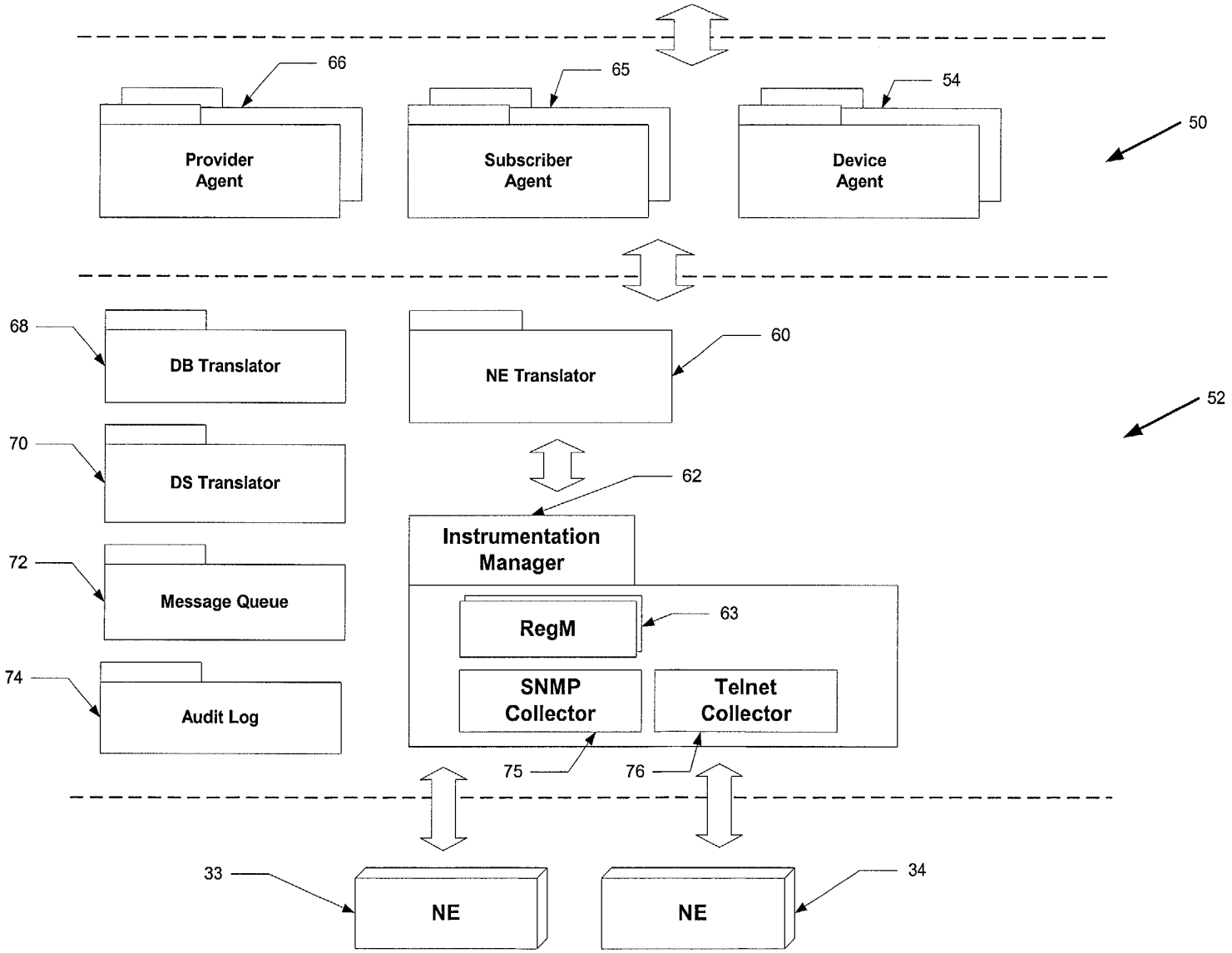

66
65
54
50
Provider Agent
Subscriber Agent
Device Agent
68
DB Translator
NE Translator
60
52
70
DS Translator
62
Instrumentation Manager
72
Message Queue
RegM
63
74
Audit Log
SNMP Collector
Telnet Collector
75
76
33
NE
NE
34

Figure 5

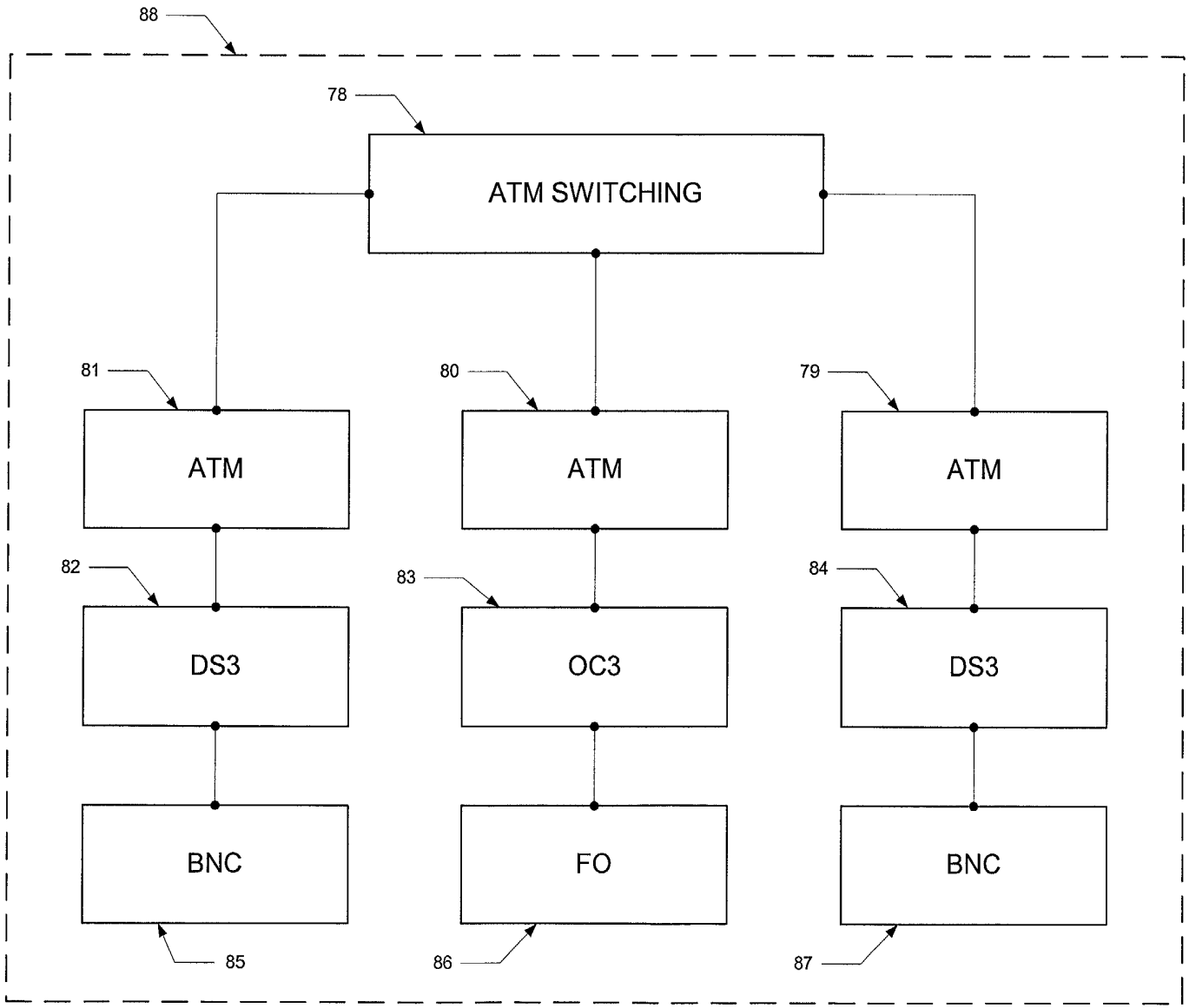
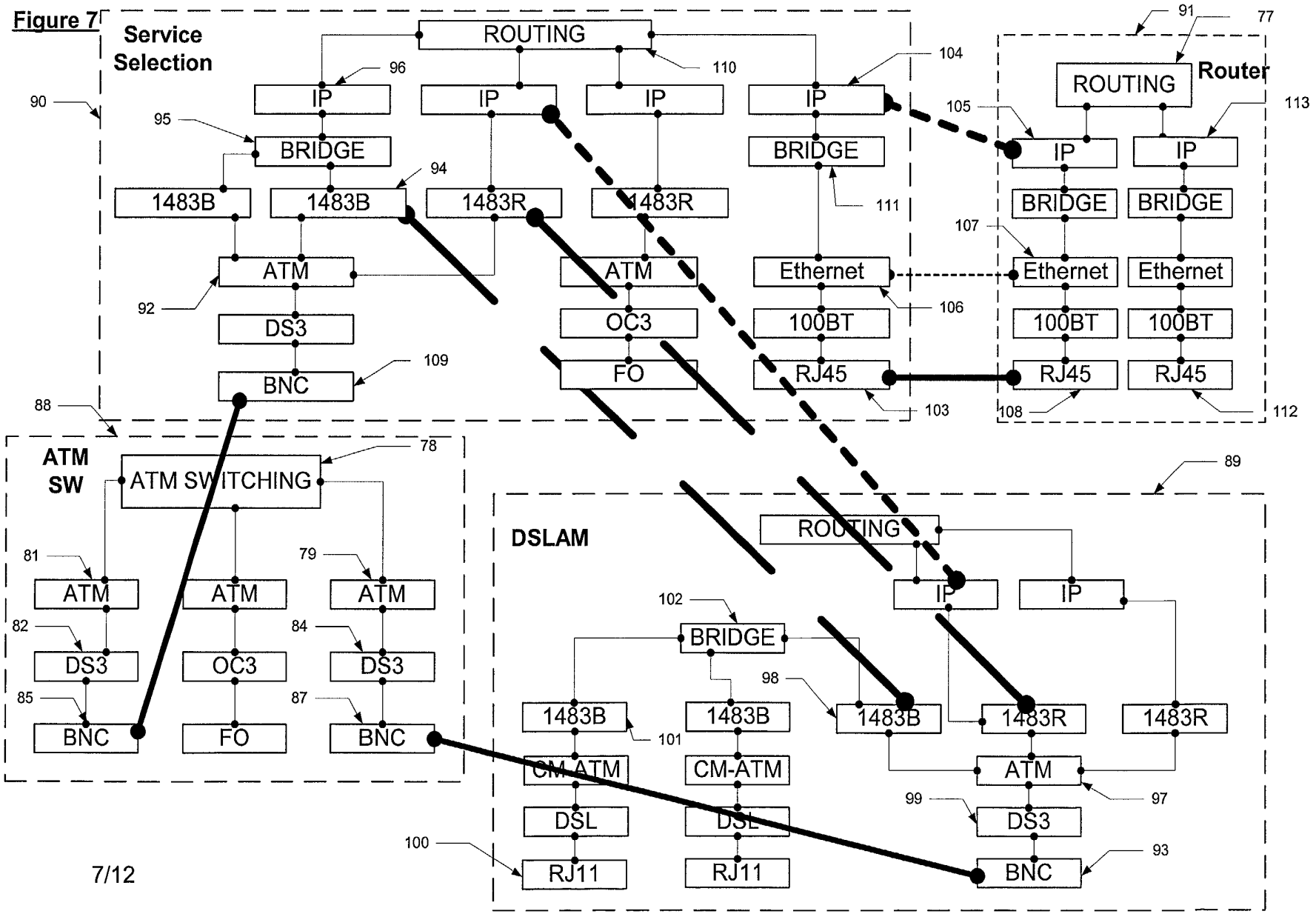

88
78
ATM SWITCHING
81
80
79
ATM
ATM
ATM
82
83
84
DS3
OC3
DS3
BNC
FO
BNC
85
86
87

Figure 6

TOE080 E0Ehh860

Figure 7



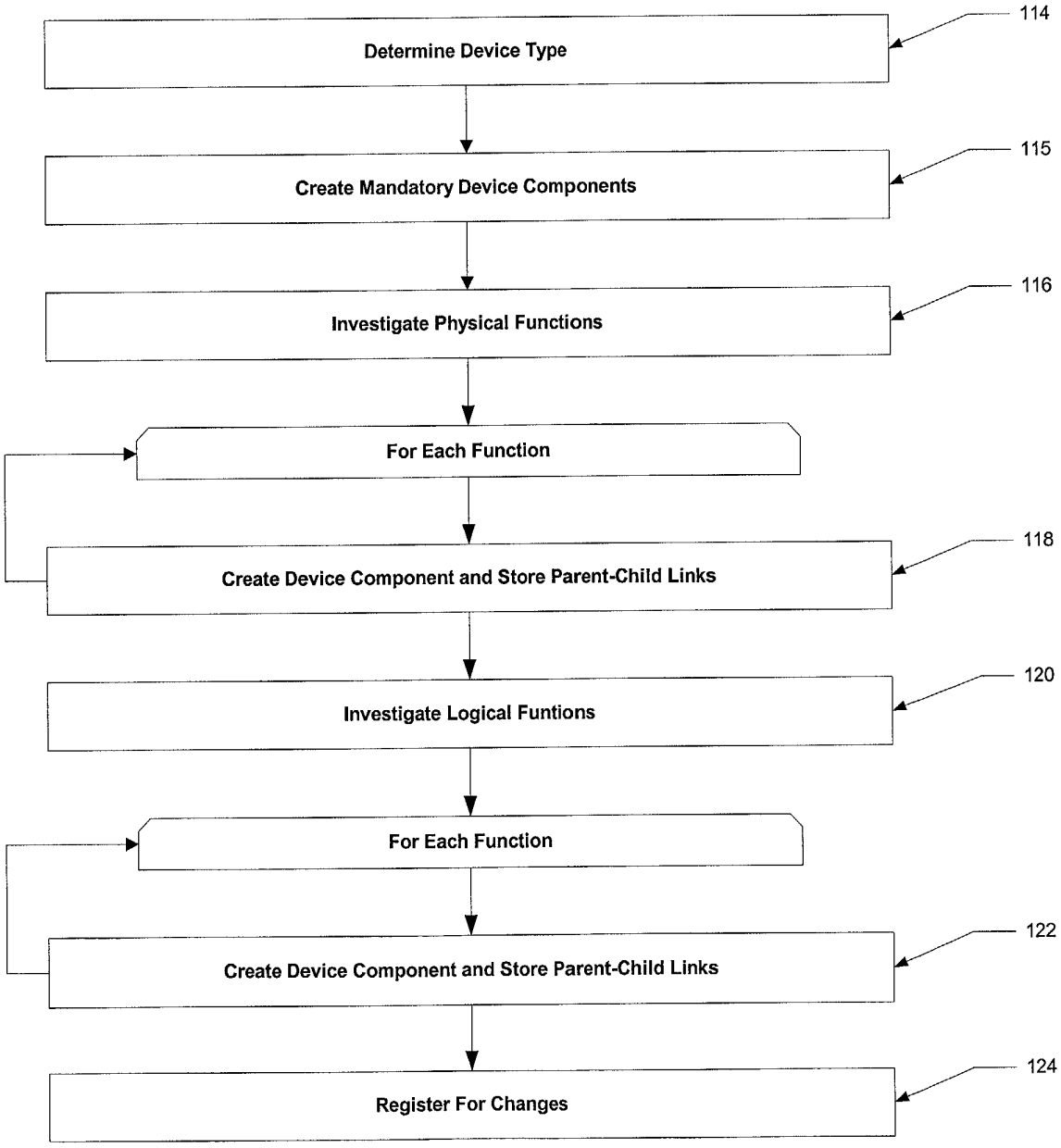

Determine Device Type
114
Create Mandatory Device Components
115
Investigate Physical Functions
116
For Each Function
Create Device Component and Store Parent-Child Links
118
Investigate Logical Funtions
120
For Each Function
Create Device Component and Store Parent-Child Links
122
Register For Changes
124

Figure 8

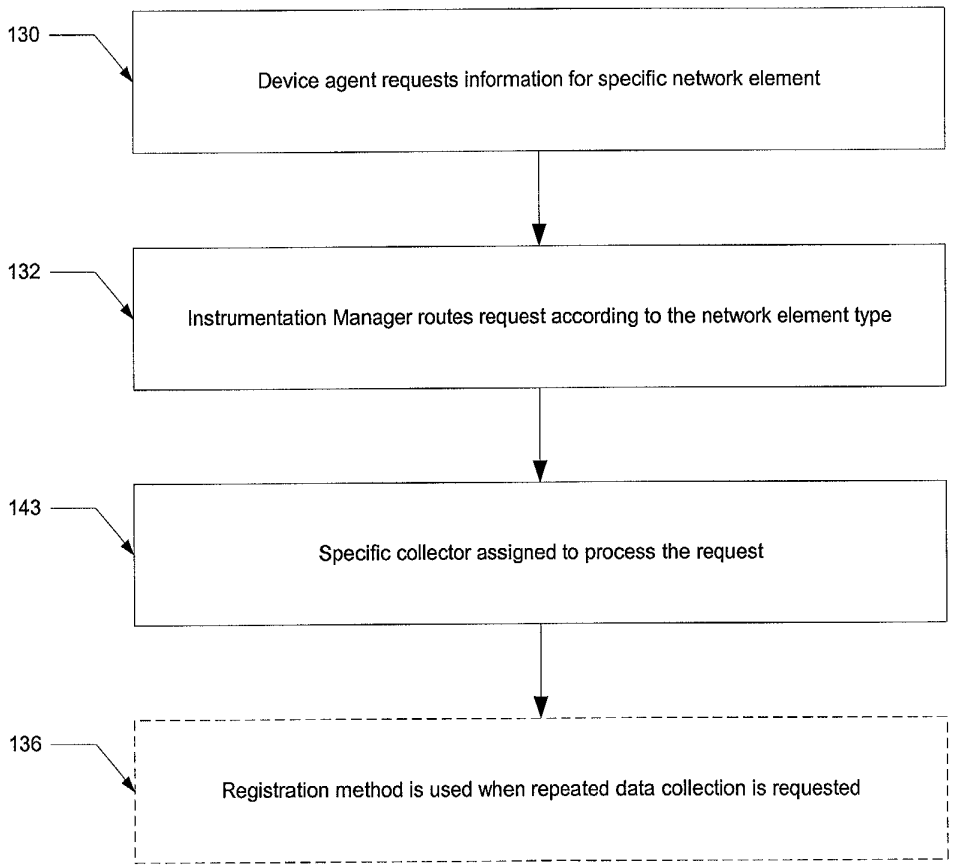

130
Device agent requests information for specific network element
132
Instrumentation Manager routes request according to the network element type
143
Specific collector assigned to process the request
136
Registration method is used when repeated data collection is requested

Figure 9

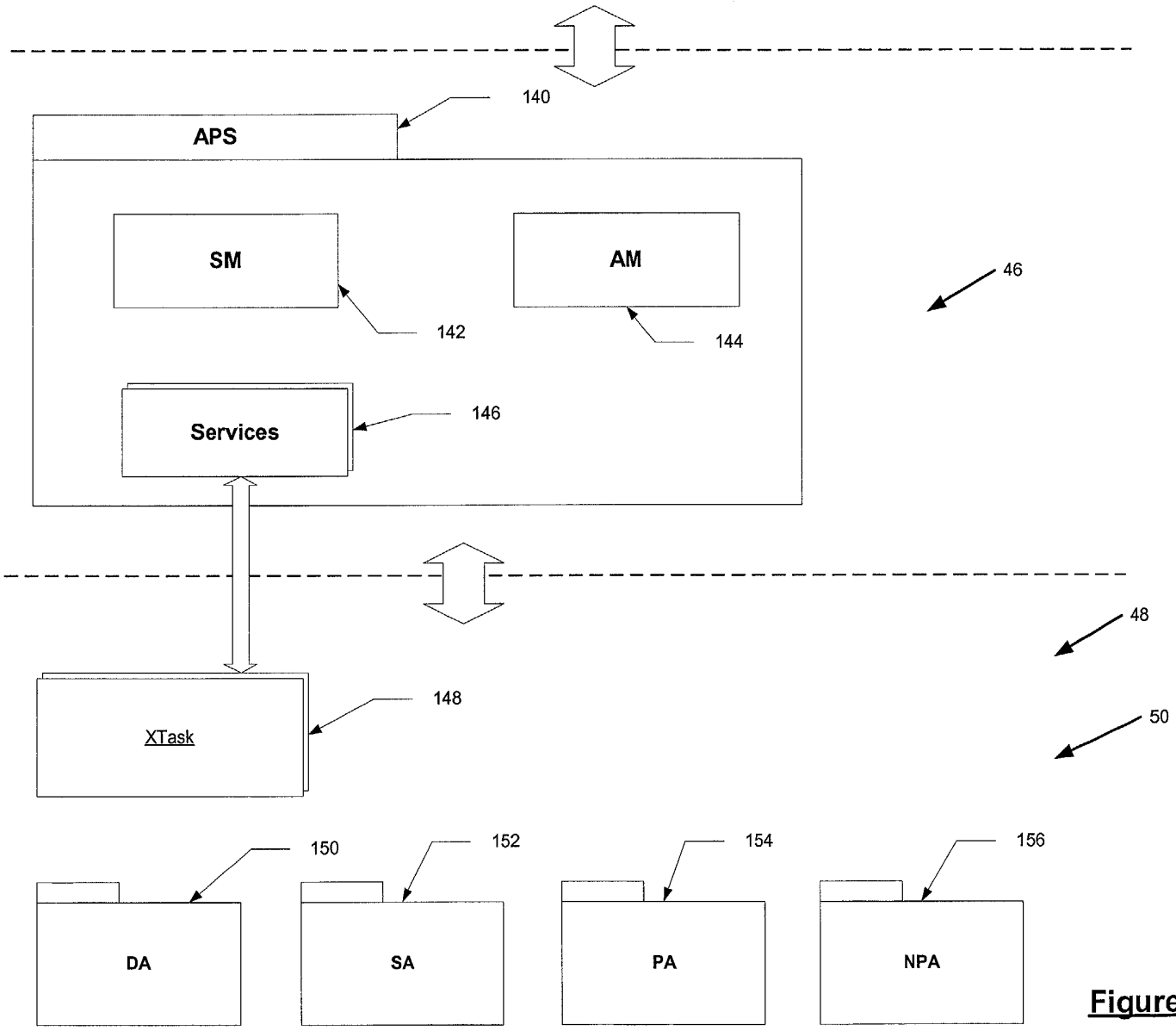

140
APS
SM
AM
142
144
46
Services
146
48
XTask
148
50
150
152
154
156
DA
SA
PA
NPA

Figure 10

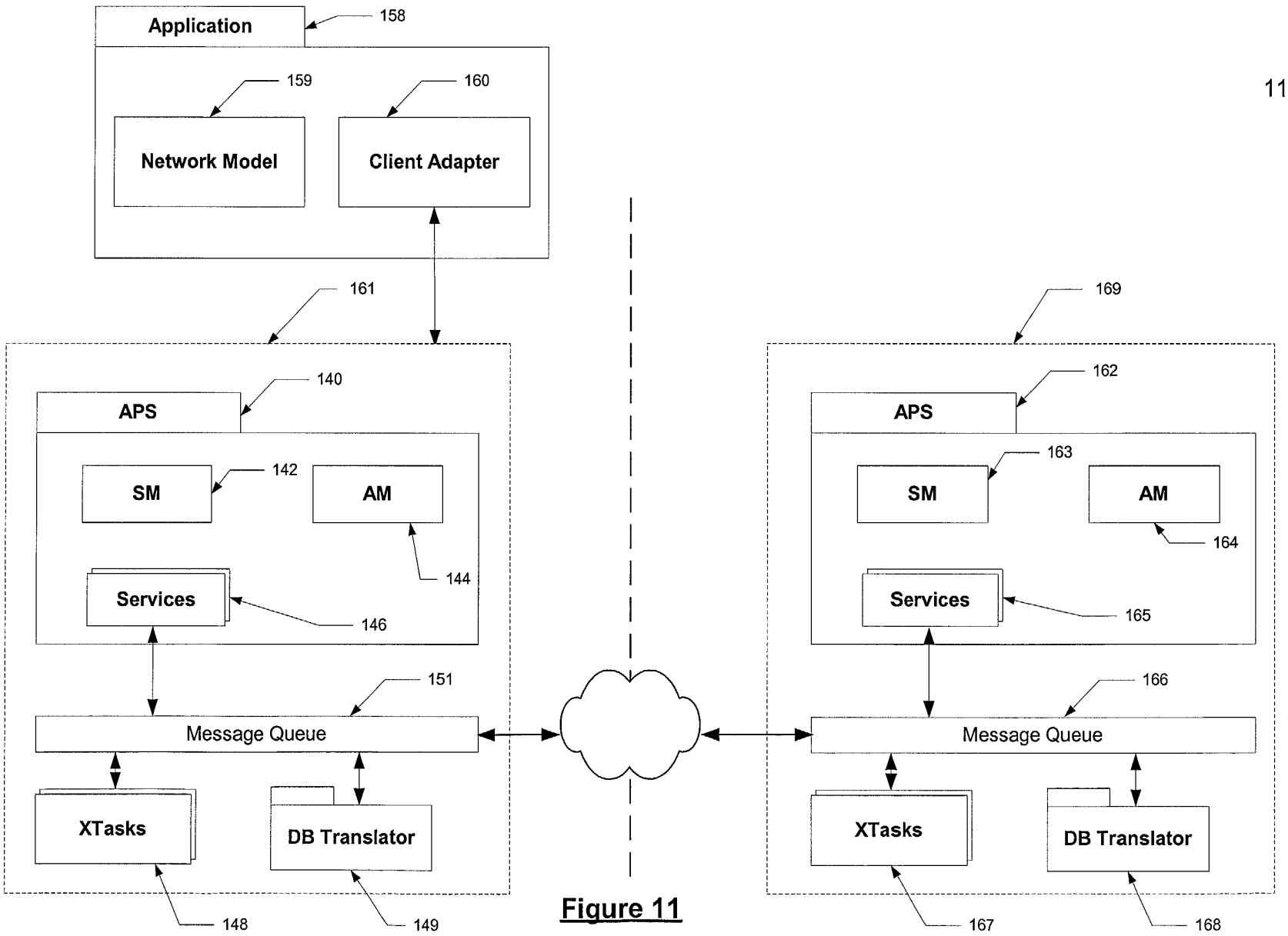

Application
158
159
160
Network Model
Client Adapter
161
169
140
APS
162
APS
142
SM
AM
163
SM
AM
164
144
Services
146
Services
165
151
166
Message Queue
Message Queue
XTasks
DB Translator
XTasks
DB Translator
148
149
167
168

Figure 11

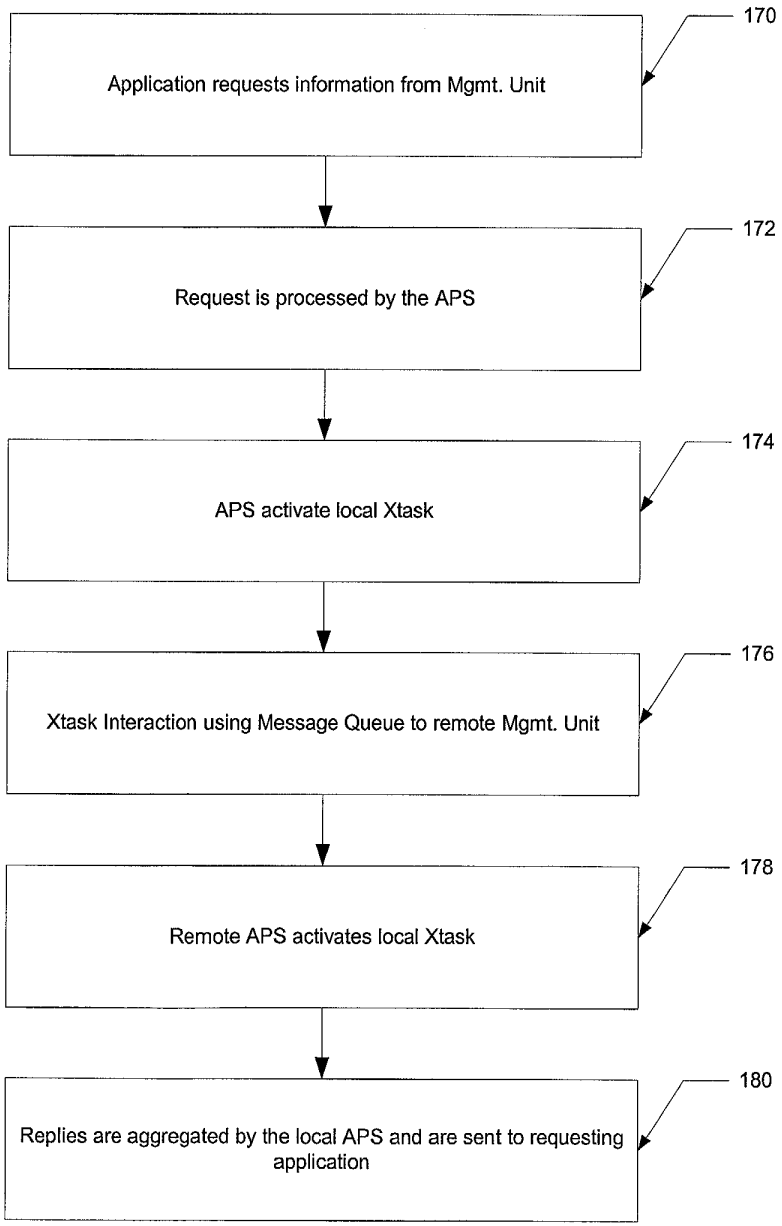

Application requests information from Mgmt. Unit
170
Request is processed by the APS
172
APS activate local Xtask
174
Xtask Interaction using Message Queue to remote Mgmt. Unit
176
Remote APS activates local Xtask
178
Replies are aggregated by the local APS and are sent to requesting application
180

Figure 12